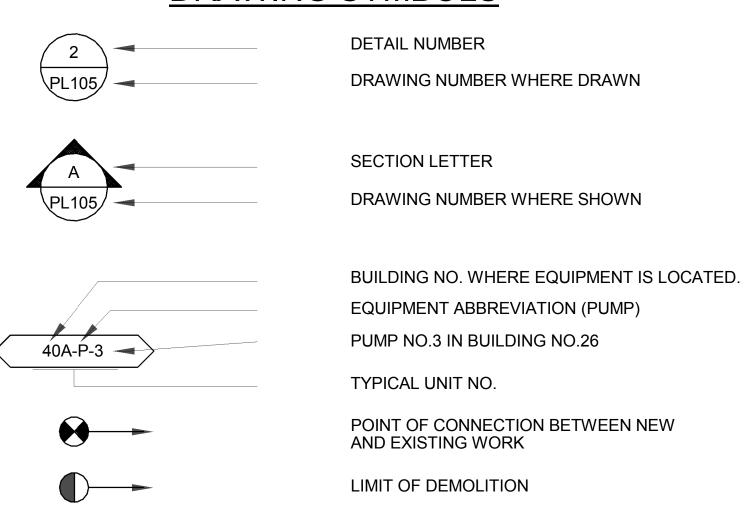
#### PLUMBING ABBREVIATIONS ROOF DRAIN **AQUASTAT** ΑT ROOF DRAIN LEADER **ROOF LEADER** AND FEET, FOOT RAIN WATER LEADER INCHES SANITARY SEWER ARCHITECT / ENGINEER SD STORM DRAIN AREA DRAIN SHUT OFF VALVE ABOVE FINISH FLOOR SUMP PUMP ABOVE FINISH GRADE SQUARE FEET AIR GAP S/S STOP/START ACCESS PANEL SERVICE WEIGHT CAST IRON SVCI ASME AMERICAN SOCIETY MECHANICAL ENGINEERS SW STORM WATER REDUCED PRESSURE BACKFLOW PREVENTER TOTAL DYNAMIC HEAD BRITISH THERMAL UNIT THERMOSTATIC MIXING VALVE BRITISH THERMAL UNIT PER HOUR TRAP PRIMER BALL VALVE TEMPERED WATER TYP **TYPICAL** CELSIUS CAST IRON UNIFORM PLUMBING CODE CUBIC FEET PER SECOND CLEANOUT **VENT** CONTRACTING OFFICER'S REPRESENTATIVE VAC VACUUM CLINICAL SINK VACUUM BREAKER CURRENT TRANSFER **VENT STACK** CTOG CLEANOUT TO GRADE VENT THROUGH ROOF COLD WATER CWFU COLD WATER FIXTURE UNIT WASTE WATER CLOSET DOMESTIC COLD WATER WALL CLEANOUT DOMESTIC EXPANSION TANK WALL HYDRANT DRAINAGE FIXTURE UNIT WATER HEATER DOMESTIC HOT WATER WATER HAMMER ARRESTER DHWR DOMESTIC HOT WATER RECIRCULATION WATER METER DN DOWN WASTE STACK DEPARTMENT OF ENERGY WATER SUPPLY FIXTURE UNIT DOWNSPOUT DISHWASHER YARD CLEANOUT DRAWING YARD HYDRANT DOMESTIC WATER HEATER DOMESTIC WATER SERVICE DRAIN WASTE VENT DOWN SPOUT NOZZLE **ELEVATION EMERGENCY SHOWER EXPANSION TANK** ELECTRIC WATER COOLER ELECTRIC WATER HEATER EYE WASH STATION **EXISTING FAHRENHEIT** FLOOR CLEANOUT **FLOOR DRAIN** FLOW METER FLOOR SINK FLOW SWITCH FIXTURE UNITS GALLONS PER DAY **GALLONS PER HOUR** GALLONS PER MINUTE H&CW HOT AND COLD WATER **HUB DRAIN** HORSEPOWER HAND SINK HEAT MAINTENANCE TAPE HOT WATER HWCP HOT WATER CIRCULATING PUMP HWFU HOT WATER FIXTURE UNIT HZ HERTZ INDUSTRIAL COLD WATER INVERT IRRIGATION WATER INDIRECT WASTE KILOWATT LAVATORY POUNDS LAVATORY METER MANUAL AIR VENT MANHOLE NORMALLY CLOSED NOT IN CONTRACT NORMALLY OPEN NON POTABLE WATER NOT TO SCALE OVERFLOW ROOF DRAIN PHASE PLUMBING PLUMBING DEMOLITION PRESSURE REDUCING VALVE POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH ATMOSPHERE POUNDS PER SQUARE INCH GAUGE CONSULTANTS:

#### **DRAWING SYMBOLS**



P-XXX

DWV

\ X

/ DW

X

RWL

X

### GENERAL PLUMBING SYMBOLS

PLUMBING FIXURE NUMBER

DOMESTIC WATER RISER

SANITARY SEWER DWV WASTE/VENT STACK

RAINWATER LEADER & OVERFLOW LEADER

	DIRECTION OF PIPE PITCH (DOWN)
	DIRECTION OF FLOW
<del></del>	ANCHOR
<b>──</b>	REDUCER OR INCREASER
	ECCENTRIC REDUCER
<u>J</u>	TOP CONNECTION, 45° OR 90°
<del></del>	BOTTOM CONNECTION, 45° OR 90°
	SIDE CONNECTION
	CAPPED OUTLET
<del></del>	RISE OR DROP IN PIPE
——————————————————————————————————————	UNION
0	PIPE UP
<b>E</b>	PIPE DOWN
<del></del>	STRAINER
————————————————————————————————————	THERMOMETER
Q <sup>1</sup>	PRESSURE GAGE
FCO <del>O</del>	FLOOR CLEAN OUT
]←——	HOSE BIB - INTERIOR
+	WALL HYDRANT - EXTERIOR
FD <b>①</b>	FLOOR DRAIN
OSD O	OPEN SITE DRAIN
RD 🔘	ROOF DRAIN
ORD 🔘	OVERFLOW ROOF DRAIN
	WATER METER
сотс ф	CLEANOUT TO GRADE
COP I	CLEANOUT PLUG
WCO II——	WALL CLEANOUT
<u> </u>	CAPPED-OFF CONNECTION FOR FUTURE
	PUMP
Q	

SHOCK ARRESTOR

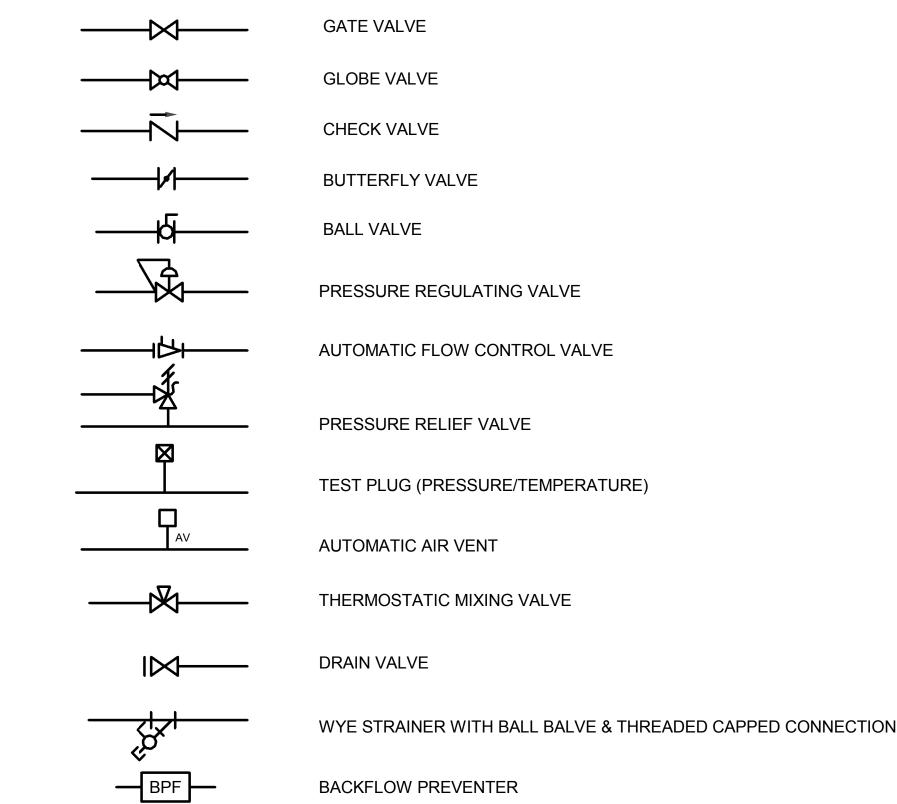
#### PLUMBING PIPING SYMBOLS

	DOMESTIC COLD WATER, COLD WATER
	DOMESTIC HOT WATER, HOT WATER
	DOMESTIC HOW WATER RETURN, HOT WATER RETURN
D	DRAIN
ORD	OVERFLOW ROOF DRAIN
	RAINWATER LEADER
SAN	SANITARY SEWER
——————————————————————————————————————	SANITARY SEWER, BELOW GRADE
SD	STORM DRAIN
——— SD ———	STORM DRAIN, BELOW GRADE
<i></i>	DOMESTIC WATER, BELOW GRADE
	EXISTING PIPING
$\times$	EXISTING PIPING TO BE REMOVED

### GENERAL PLUMBING NOTES

- A. ALL WORK AND MATERIALS PROVIDED FOTHIS PROJECT SHALL BE IN ACCORDANCE WITH DIVISION 22 SPECIFICATIONS.
- . CONTRACTOR SHALL PROVIDE COMPLETE LAYOUT DRAWINGS IN ACCORDANCE WITH DIVISION 22 SPECIFICATIONS. NO WORK SHALL PROCEED UNTIL ALL OF THE LAYOUT DRAWINGS HAVE BEEN APPROVED.
- PROJECT PHASING: CONTRACTOR SHALL PHASE DEMOLITION AND NEW WORK IN ACCORDANCE WITH INFORMATION SHOWN ON PLUMBINSHEET PD-100 AND ARCHITECTURAL SHEET AD-100.
- D. ALL WORK IN BLDG 40E SHALL BE COORDINATED & SCHEDULED WITH COR, NO EXCEPTIONS.
- E. COORDINATE EXACT LOCATIONS AND ELEVATIONS OF ELECTRICAL DEVICES WITH DIVISION 26 CONTRACTOR.
- F. CONTRACTOR SHALL COORDINATE EXACT LOCATION AND ELEVATION OF ALL SHEAR ALL PENETRATIONS WITH STRUCTURAL ENGINEER.
- G. ALL DOMESTIC WATER BRANCH LINES SHALL BE PROVIDED WITH BALL VALVE SHUT-OFFS IN ACCESSIBLE LOCATIONS.

#### PLUMBING VALVE SYMBOLS



#### **PLUMBING CONTROLS**

(AI)	ANALOG INPUT TO DDC
(AO)	ANALOG OUTPUT TO DDC
$\langle DO \rangle$	DIGITAL OUTPUT TO DDC
(DI)	DIGITAL INPUT TO DDC

#### SHEET INDEX

PL001 PLUMBING SYMBOLS LISTS AND SHEET INDEX

PD100 BUILDING 8 DEMOLITION PLAN - PLUMBING

PL099 BELOW GRADE PLUMBING PLAN
PL100 BASEMENT LEVEL PLUMBING PLAN

PL101 LEVEL 1 PLUMBING PLAN PL102 LEVEL 2 PLUMBING PLAN

PL150 ROOF PLUMBING PLAN
PL401 PARTIAL FLOOR PLANS - PLU

PL401 PARTIAL FLOOR PLANS - PLUMBING
PL402 PARTIAL FLOOR PLAN - PLUMBING
PL501 PLUMBING DETAILS

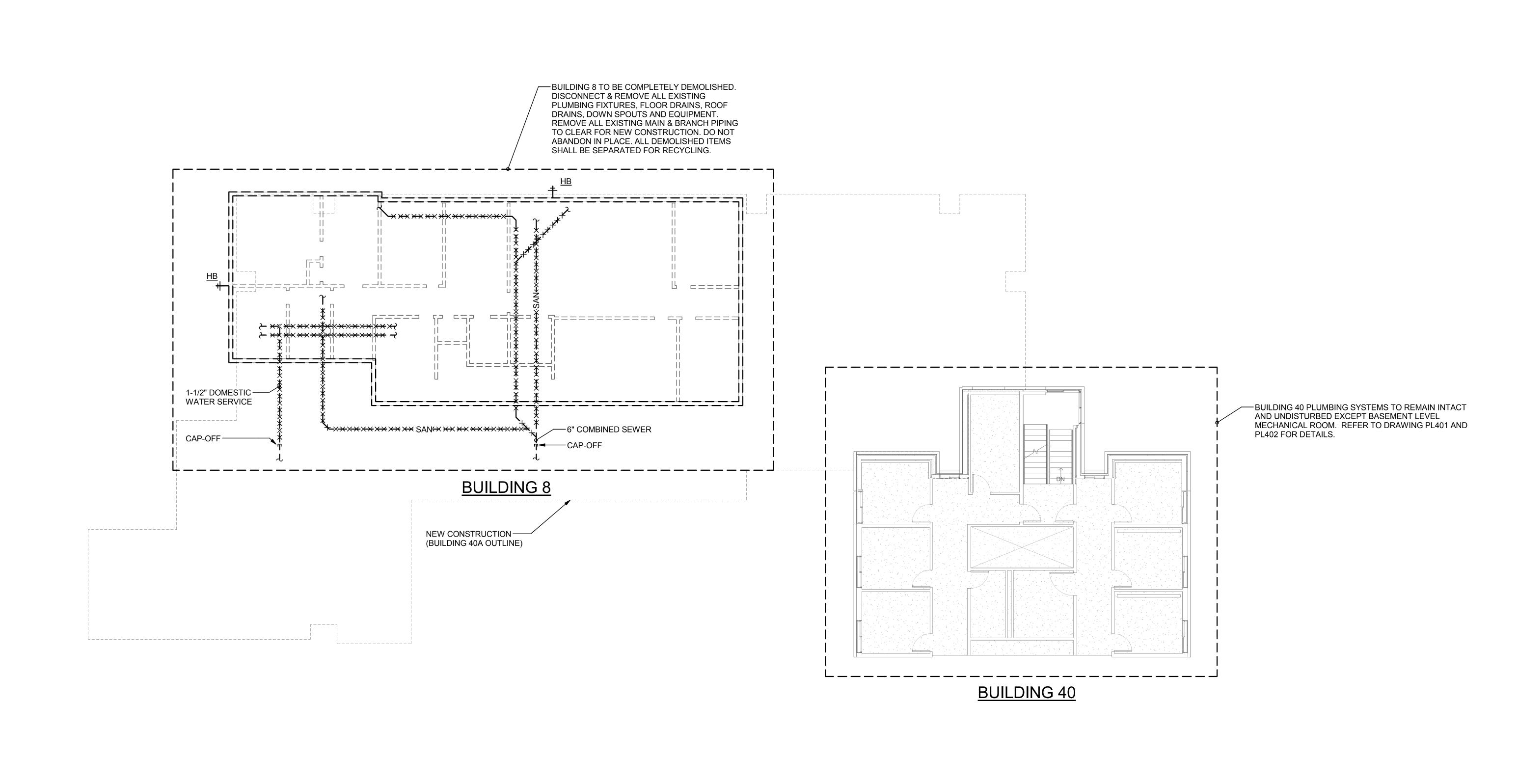
PL501 PLUMBING DETAILS

PL601 PLUMBING RISER DIAGRAMS
PL602 PLUMBING RISER DIAGRAMS
PL603 PLUMBING RISER DIAGRAMS

PL610 PLUMBING SCHEDULES

### BID DOCUMENT NOVEMBER/02/2015

Drawing Title Project Title Project Number ARCHITECT/ENGINEERS: Office of INTENSIVE OUTPATIENT MENTAL HEALTH PLUMBING SYMBOLS LISTS AND EDUCATION BUILDING Construction BID DOCUMENT 11/02/2015 PROJECT 2013-0512 **Building Number AND SHEET INDEX** CONTACT John McMichael SPOKANE VA MEDICAL CENTER 100% CONSTRUCTION DOCUMENT 1/26/2015 and Facilities SPOKANE, WASHINGTON 99205 INTERFACE 12/30/14 Approved: Project Director Drawing Number Management 99% CONSTRUCTION DOCUMENT 12/17/14 100 SW Main Street SPOKANE, WASHINGTON 99205 95% CONSTRUCTION DOCUMENT 10/13/14 Suite 1600 **PL001** Approver Portland, OR 97204 65% DESIGN DEVELOPMENT 6/27/14 Checked 14410 SE Petrovitsky Rd. Suite 206 TEL 503.382.2266 FAX 503.382.2262 Department of Veterans Affairs Renton, WA 98058 SCHEMATIC DESIGN 3/28/14 **JRM** www.interfaceengineering.com 11/02/2015 Dwg. of EXP. 4/13/16 425-291-7078 Date Revisions |



BUILDING 8 DEMOLITION PLAN - PLUMBING

1/8" = 1'-0"

#### BID DOCUMENT NOVEMBER/02/2015

		CONSULTANTS:		ARCHITECT/ENGINEERS:		Project Title INTENSIVE OUTPATI		HEALTH	Project Number 668-313	Office of
	BID DOCUMENT 11/02/2015 100% CONSTRUCTION DOCUMENT 1/26/2015 12/30/14	PROJECT 2013-0512 CONTACT John McMichael INTERFACE	R. McMic		PLAN - PLUMBING	SPOKANE VA MEDICASPOKANE, WASHING	AL CENTER		Building Number 40A	Construction and Facilities
» ————————————————————————————————————	99% CONSTRUCTION DOCUMENT 12/17/14 95% CONSTRUCTION DOCUMENT 10/13/14	ENGINEERING  100 SW Main Street	In R. Ma Michael	ARCHITECTS	Approved: Project Director	Location SPOKANE, WASHING	GTON 99205		Drawing Number	Management
	65% DESIGN DEVELOPMENT 6/27/14 SCHEMATIC DESIGN 3/28/14 Revisions ISSUES Date	Suite 1600 Portland, OR 97204 TEL 503.382.2266 FAX 503.382.2262 www.interfaceengineering.com	EXP. 4/13/16 11/02/15	14410 SE Petrovitsky Rd. Suite 206 Renton, WA 98058 425-291-7078	Approver	Issue Date 11/02/2015	Checked JRM	Drawn IEI	<b>PD100</b> Dwg. of	Department of Veterans Affairs

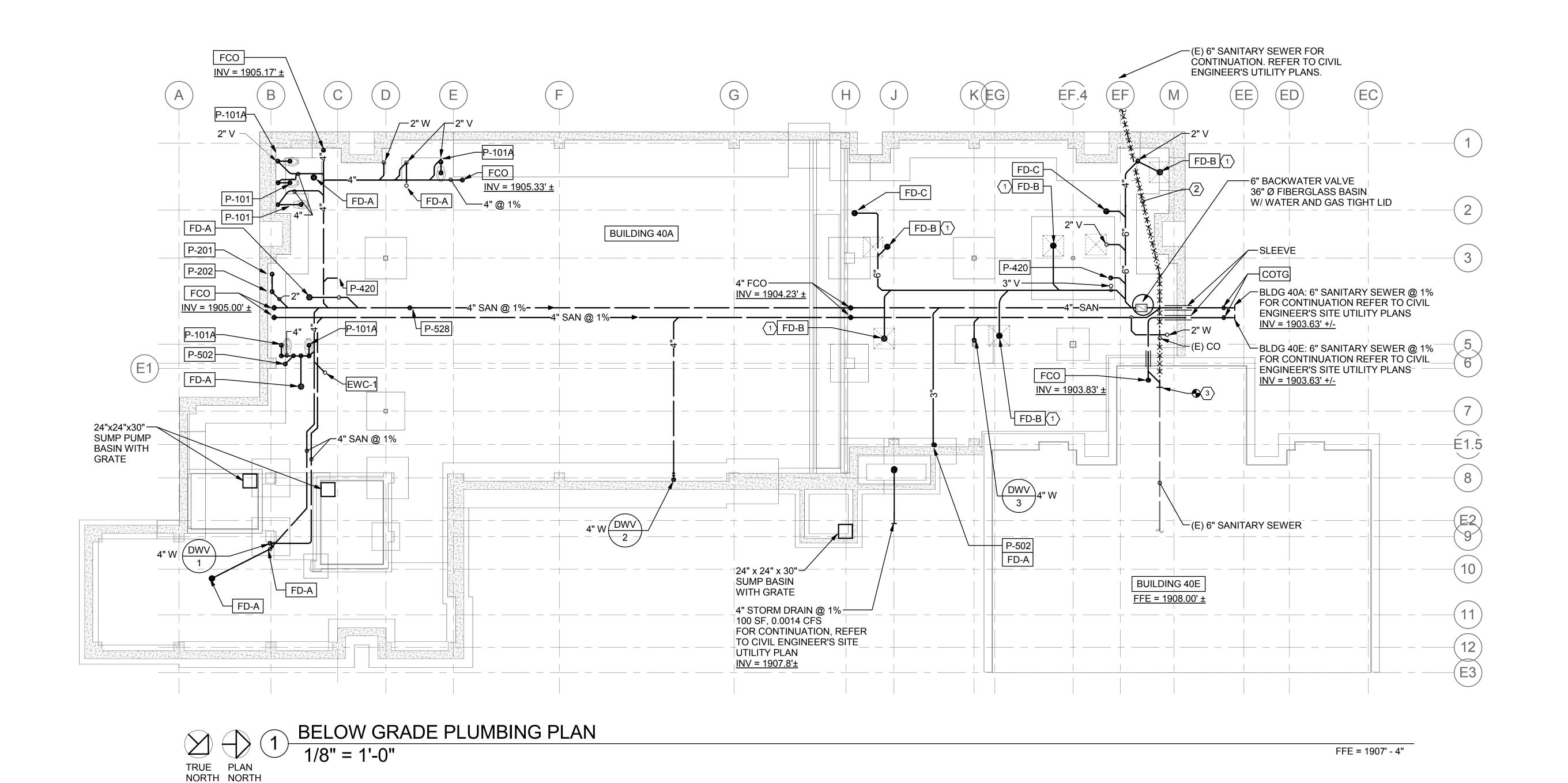
1 2 8 9

#### **GENERAL SHEET NOTES**

- A. SANITARY SEWER MAIN SHALL RUN @ 1%. BRANCH LINES SHALL BE RUN @ 2%.
- B. ALL FLOOR & OPEN SIZE DRAINS SHALL BE PRIMED.C. FLOOR DRAINS IN MECHANICAL ROOM SHALL HAVE DEEP SEAL TRAPS.

#### ○ SHEET KEYNOTES

- 1 FLOOR DRAIN STRAINER SHALL BE SET @ 1" BELOW FINISHED FLOOR ELEVATION. COORDINATION SLOPING OF CONCRETE WITH DIVISION 3 WORK.
- 2 VERIFY EXACT LOCATION OF EXISTING 6" SANITARY SEWER LATERAL FROM BLDG 40A. REMOVE EXISTING PIPING TO CLEAR FOR NEW CONSTRUCTION. DO NOT ABANDON IN PLACE. COORDINATE WITH CIVIL WORK TO PROVIDE TEMPORARY CONNECTION OF SANITARY SEWER DURING CONTRUCTION OF BUILDING 40A.
- 3 COORDINATE RE-ROUTING OF BUILDING 40E SANITARY SEWER WITH COR & FACILITIES MANAGER.



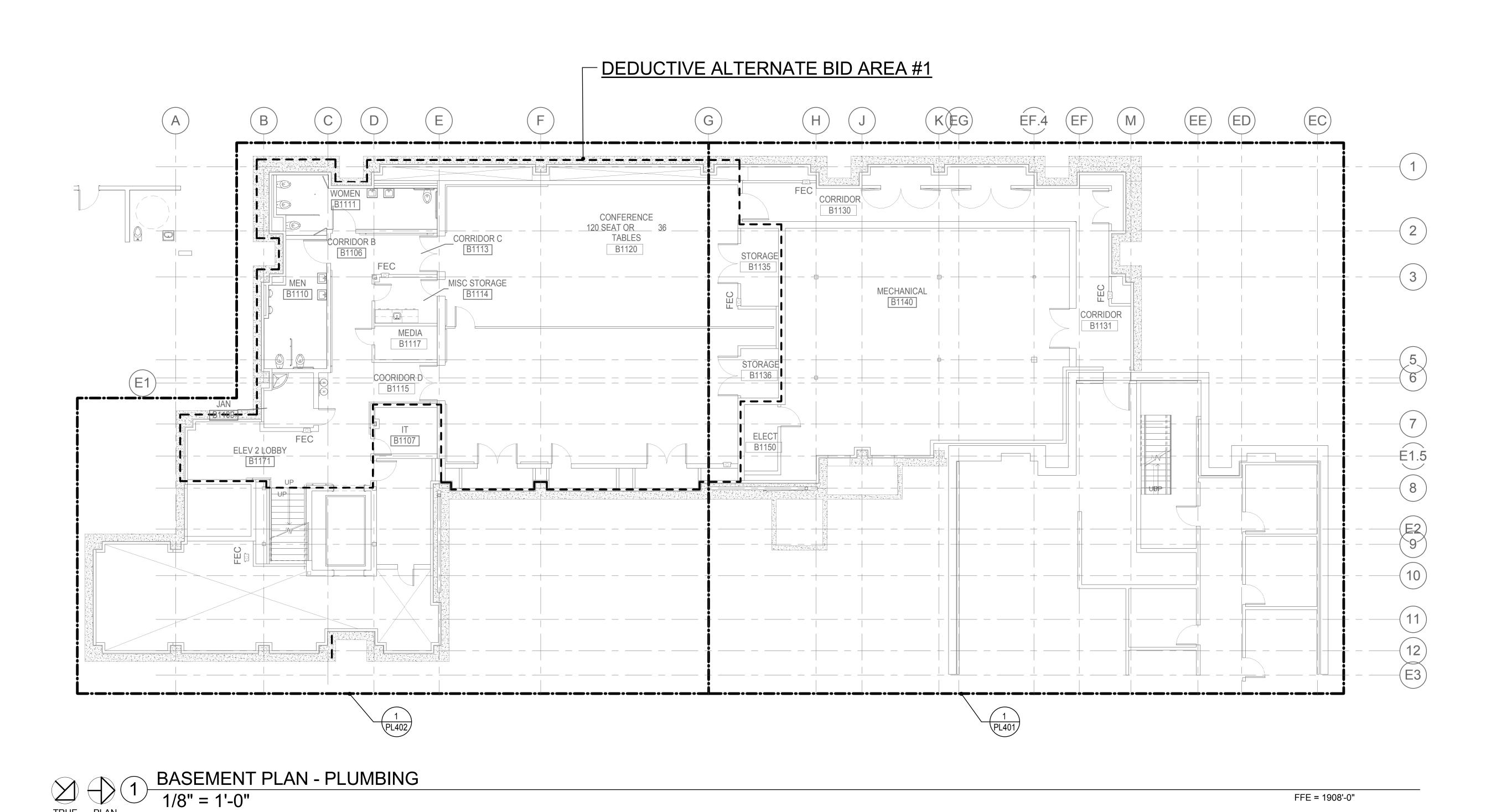
## BID DOCUMENT NOVEMBER/02/2015

Drawing Title Project Title Project Number CONSULTANTS: ARCHITECT/ENGINEERS: Office of INTENSIVE OUTPATIENT MENTAL HEALTH **BELOW GRADE PLUMBING** AND EDUCATION BUILDING Construction BID DOCUMENT 11/02/2015 PROJECT 2013-0512 Building Number PLAN CONTACT John McMichael SPOKANE VA MEDICAL CENTER SPOKANE, WASHINGTON 99205 100% CONSTRUCTION DOCUMENT 1/26/2015 and Facilities INTERFACE ENGINEERING 12/30/14 Approved: Project Director Drawing Number Location Management 99% CONSTRUCTION DOCUMENT 12/17/14 100 SW Main Street SPOKANE, WASHINGTON 99205 95% CONSTRUCTION DOCUMENT 10/13/14 Suite 1600 Portland, OR 97204 TEL 503.382.2266 Approver **PL099** 65% DESIGN DEVELOPMENT 6/27/14 Checked 14410 SE Petrovitsky Rd. Suite 206 FAX 503.382.2262 www.interfaceengineering.com Department of Veterans Affairs SCHEMATIC DESIGN 3/28/14 Renton, WA 98058 JRM 11/02/2015 IEI Dwg. of 425-291-7078 Date ISSUES Revisions

foot 0

#### DEDUCTIVE ALTERNATE BID AREA #1 **CONSTRUCTION NOTES:**

- DELETE ALL PLUMBING FIXTURES AND DRAINS FROM SCOPE OF WORK EXCEPT P-801 WALL HYDRANTS.
   PROVIDE ALL WATER AND WASTE PIPING SERVING FLOORS ABOVE.
- ROUGH-IN ONLY, FOR ALL PLUMBING FIXTURES AND DRAINS SHOWN IN ALTERNATE BID AREA #1.



TRUE PLAN NORTH NORTH

#### **BID DOCUMENT NOVEMBER/02/2015**

FFE = 1908'-0"

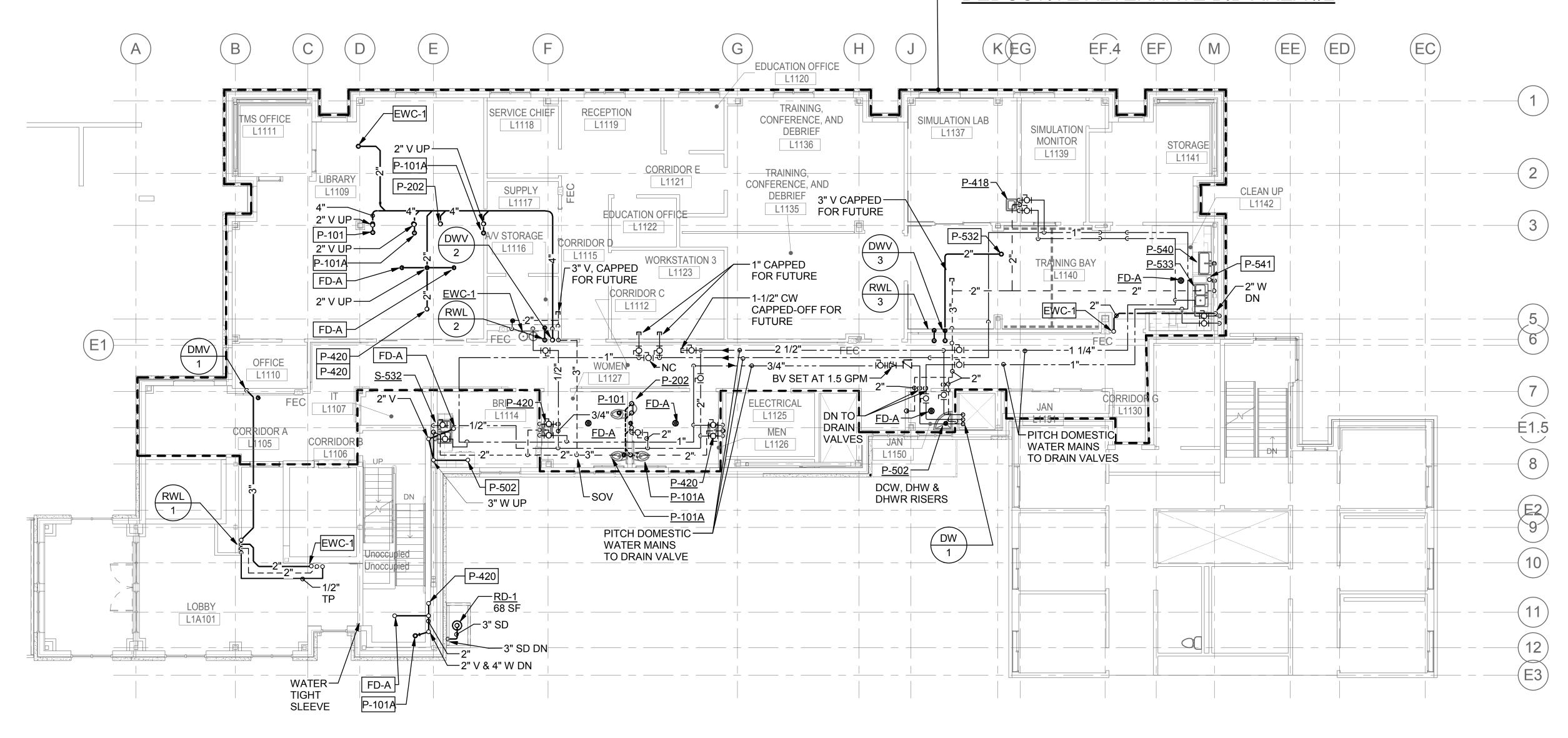
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9		CONSULTANTS:	ARCHITECT/ENGINEERS:	Drawing Title  BASEMENT LEVEL	Project Title  INTENSIVE OUTPATIENT MENTA	Project Number 668-313	Office of
	BID DOCUMENT 11/02/2015 100% CONSTRUCTION DOCUMENT 1/26/2015 12/30/14	PROJECT 2013-0512 CONTACT John McMichael  INTERFACE	R. McM OF VASA	PLUMBING PLAN	AND EDUCATION BUILDING  SPOKANE VA MEDICAL CENTER SPOKANE, WASHINGTON 99205	Building Number 40A	Construction and Facilities
8	99% CONSTRUCTION DOCUMENT 12/17/14 95% CONSTRUCTION DOCUMENT 10/13/14	ENGINEERING  100 SW Main Street Suite 1600 Portland, OR 97204	ARCHITECTS	Approved: Project Director	Location SPOKANE, WASHINGTON 99205	Drawing Number	Managemer
, <del>4</del>	65% DESIGN DEVELOPMENT 6/27/14  SCHEMATIC DESIGN 3/28/14  evisions ISSUES Date	TEL 503.382.2266 FAX 503.382.2262 www.interfaceengineering.com	EXP. 4/13/16 11/02/15 14410 SE Petrovitsky Rd. Suite 206 Renton, WA 98058 425-291-7078	Approver	Issue Date Checked  11/02/2015 JRM	Drawn IEI Dwg. of	Department Veterans A

1 2 8 9

### DEDUCTIVE ALTERNATE BID AREA #2 CONSTRUCTION NOTES:

- DELETE ALL PLUMBING FIXTURES AND DRAINS FROM SCOPE OF WORK. PROVIDE ALL WATER AND WASTE PIPING SERVING FLOORS ABOVE.
- 2. ROUGH-IN ONLY, FOR ALL PLUMBING FIXTURES SHOWN IN ALTERNATE BID AREA #2.

#### — <u>DEDUCTIVE ALTERNATE BID AREA #2</u>



LEVEL 1 PLAN - PLUMBING

TRUE PLAN NORTH

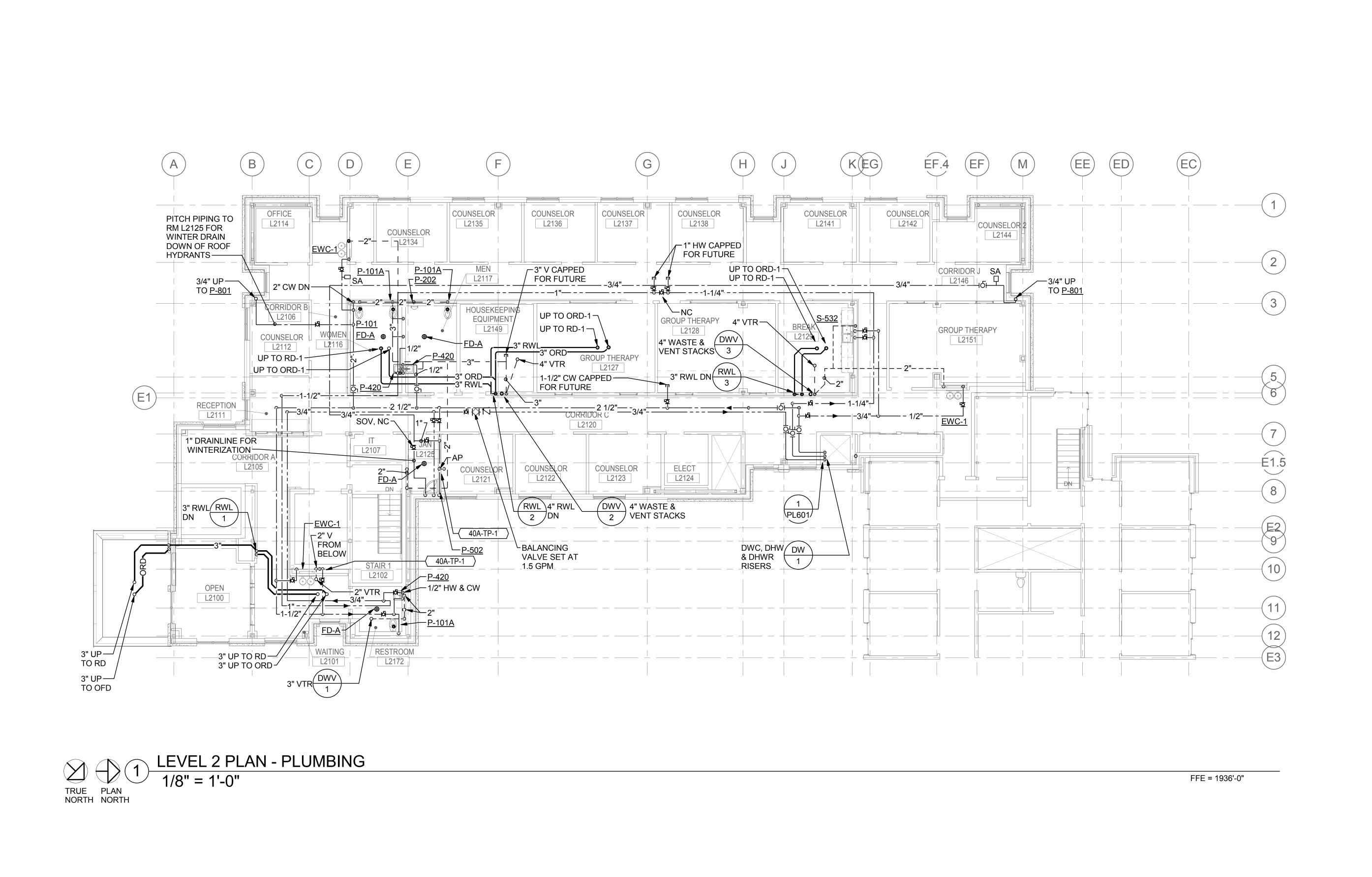
1/8" = 1'-0"

FFE = 1922'-0"

# BID DOCUMENT NOVEMBER/02/2015

			CONSULTANTS:		ARCHITECT/ENGINEERS:	LEVEL 1 PLUMBING PLAN	Project Title INTENSIVE OUTPATI		HEALTH	Project Number 668-313	Office of
	BID DOCUMENT  100% CONSTRUCTION DOCUMENT	11/02/2015 1/26/2015 12/30/14	PROJECT 2013-0512 CONTACT John McMichael INTERFACE	R. McMic	SDVOSB	LLVLL II LOMDING I LAN	SPOKANE VA MEDICASPOKANE, WASHING	AL CENTER		Building Number 40A	Construction and Facilities
	99% CONSTRUCTION DOCUMENT 95% CONSTRUCTION DOCUMENT	12/17/14 10/13/14	ENGINEERING  100 SW Main Street	Land Restar	ARCHITECTS	Approved: Project Director	Location SPOKANE, WASHING	TON 99205		Drawing Number	Management
4	65% DESIGN DEVELOPMENT	6/27/14	Suite 1600 Portland, OR 97204 TEL 503.382.2266 FAX 503.382.2262	SSIONAL ENGINE	14410 SE Petrovitsky Rd. Suite 206	Approver			Drawn	PL101	A A Department of
	SCHEMATIC DESIGN Revisions ISSUES	Date	www.interfaceengineering.com	EXP. 4/13/16 11/02/15	Renton, WA 98058 425-291-7078		11/02/2015	JRM	IEI	Dwg. of	Veterans Affairs

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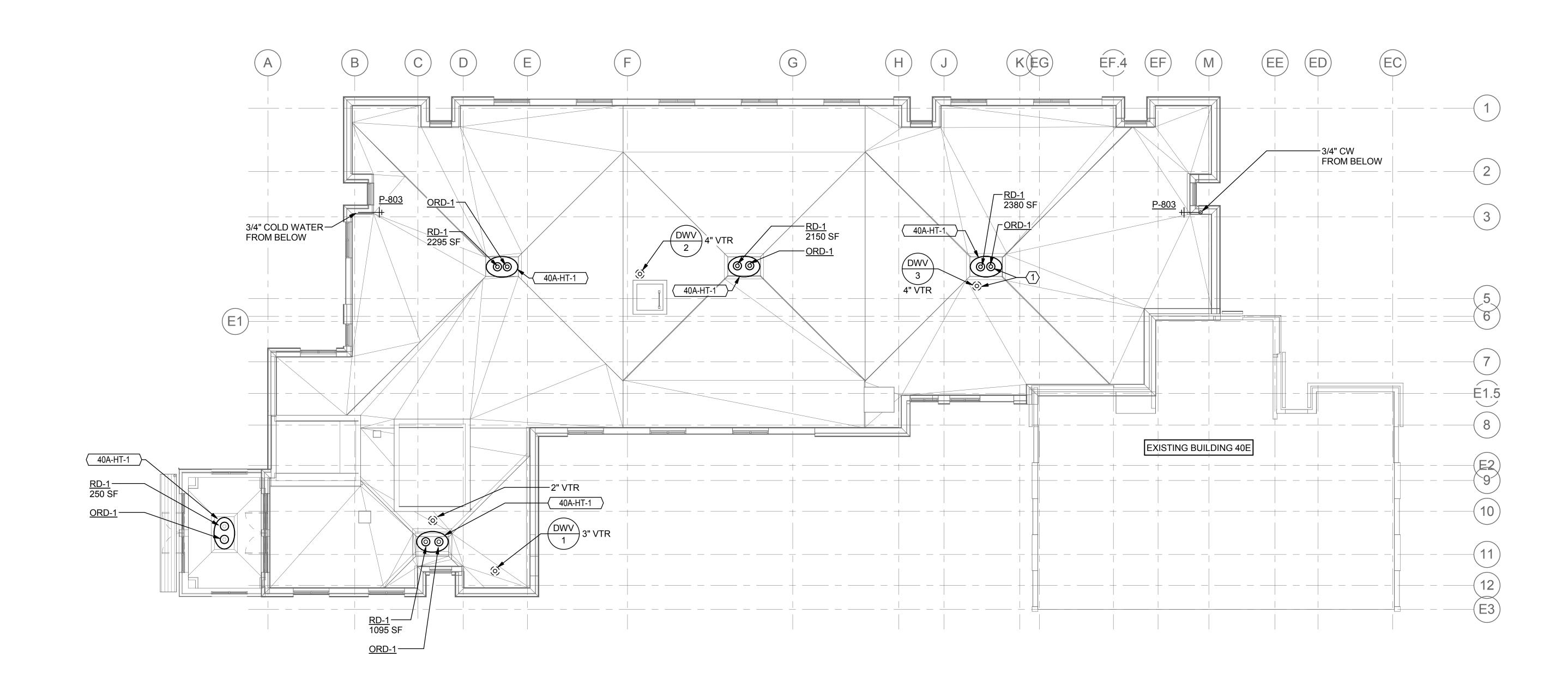
**BID DOCUMENT NOVEMBER/02/2015** 

one eighth inch = one foot

0 4 8 16 Drawing Title Project Title Project Number CONSULTANTS: ARCHITECT/ENGINEERS: Office of INTENSIVE OUTPATIENT MENTAL HEALTH **LEVEL 2 PLUMBING PLAN** AND EDUCATION BUILDING Construction 11/02/2015 PROJECT 2013-0512
CONTACT John McMichael BID DOCUMENT Building Number SPOKANE VA MEDICAL CENTER SPOKANE, WASHINGTON 99205 1/26/2015 100% CONSTRUCTION DOCUMENT and Facilities INTERFACE ENGINEERING 12/30/14 Approved: Project Director Drawing Number Management 99% CONSTRUCTION DOCUMENT 12/17/14 100 SW Main Street SPOKANE, WASHINGTON 99205 95% CONSTRUCTION DOCUMENT Suite 1600
Portland, OR 97204
TEL 503.382.2266
FAX 503.382.2262
www.interfaceengineering.com 10/13/14 Approver PL102 65% DESIGN DEVELOPMENT 6/27/14 14410 SE Petrovitsky Rd. Suite 206 Checked Department of Veterans Affairs Renton, WA 98058 SCHEMATIC DESIGN 3/28/14 JRM 11/02/2015 IEI Dwg. of EXP. 4/13/16 11/02/15 425-291-7078 Date ISSUES Revisions |



1 REFER TO ARCHITECTURAL DETAILS FOR FLASHING OF VTR'S AND INSTALLATION OF ROOF DRAINS IN ROOFING SYSTEM, TYPICAL



ROOF PLAN - PLUMBING

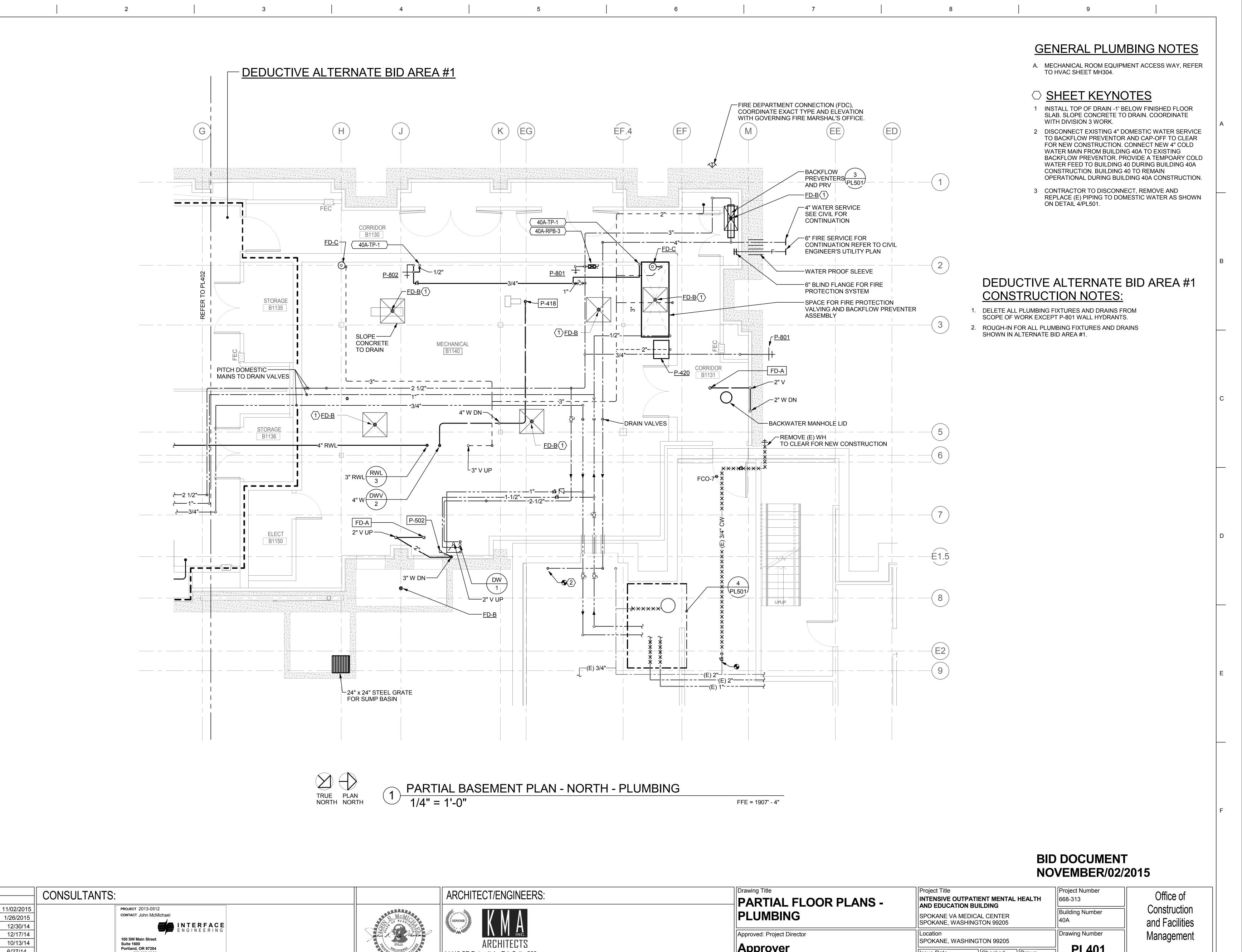
1/8" = 1'-0"

#### **BID DOCUMENT NOVEMBER/02/2015**

FFE = 1949'-5"

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9		CONSULTANTS:	ARCHITECT/ENGINEERS:	ROOF PLUMBING PLAN	Project Title INTENSIVE OUTPATIENT MENTAL I	Project Number 668-313	Office of
	BID DOCUMENT 11/02/2015 100% CONSTRUCTION DOCUMENT 1/26/2015 12/30/14	PROJECT 2013-0512 CONTACT John McMichael  INTERFACE	R. McMic Solvosb	IXOOI I LOMBING I LAN	AND EDUCATION BUILDING  SPOKANE VA MEDICAL CENTER SPOKANE, WASHINGTON 99205	Building Number 40A	Construction and Facilities
	99% CONSTRUCTION DOCUMENT 12/17/14 95% CONSTRUCTION DOCUMENT 10/13/14	ENGINEERING  100 SW Main Street Suite 1600 Portland, OR 97204	ARCHITECTS	Approved: Project Director  Approver	Location SPOKANE, WASHINGTON 99205	Drawing Number PL150	Manageme
4	65% DESIGN DEVELOPMENT 6/27/14  SCHEMATIC DESIGN 3/28/14  Revisions ISSUES Date	TEL 503.382.2266  FAX 503.382.2262  www.interfaceengineering.com	EXP. 4/13/16 11/02/15 14410 SE Petrovitsky Rd. Suite 206 Renton, WA 98058 425-291-7078	Approver	Issue Date Checked  11/02/2015 JRM	Drawn IEI Dwg. of	Departme Veterans

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Renton, WA 98058

425-291-7078

Approver

**PL401** 

Dwg. of

Department of Veterans Affairs

Checked

**JRM** 

11/02/2015

BID DOCUMENT

100% CONSTRUCTION DOCUMENT

99% CONSTRUCTION DOCUMENT

95% CONSTRUCTION DOCUMENT

6/27/14

3/28/14

Date

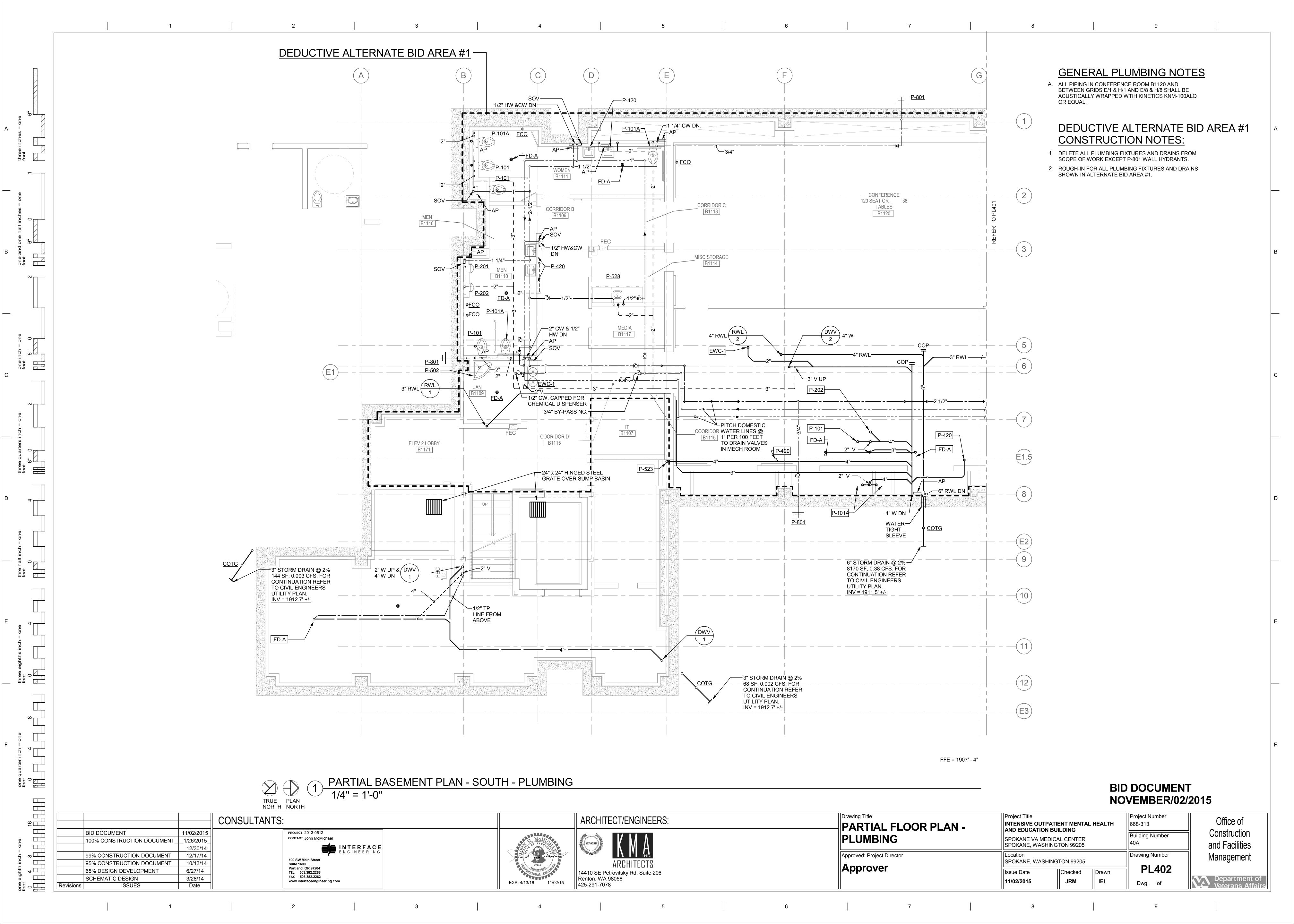
TEL 503.382.2266 FAX 503.382.2262

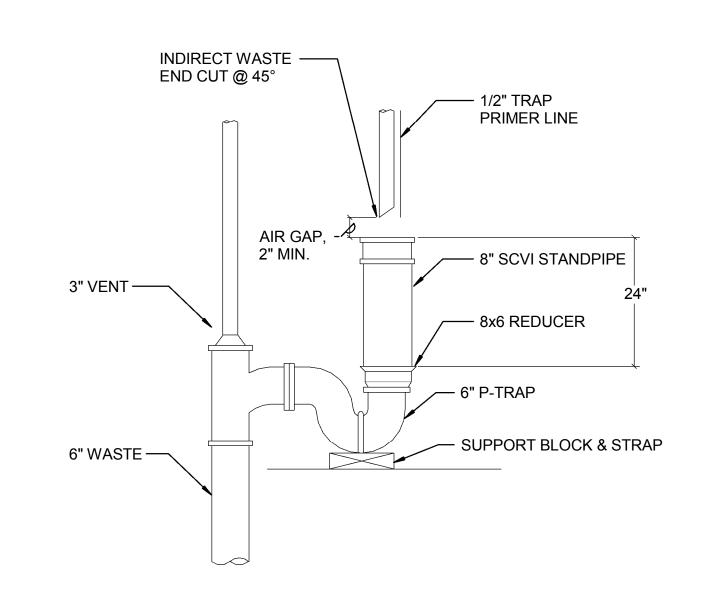
www.interfaceengineering.com

65% DESIGN DEVELOPMENT

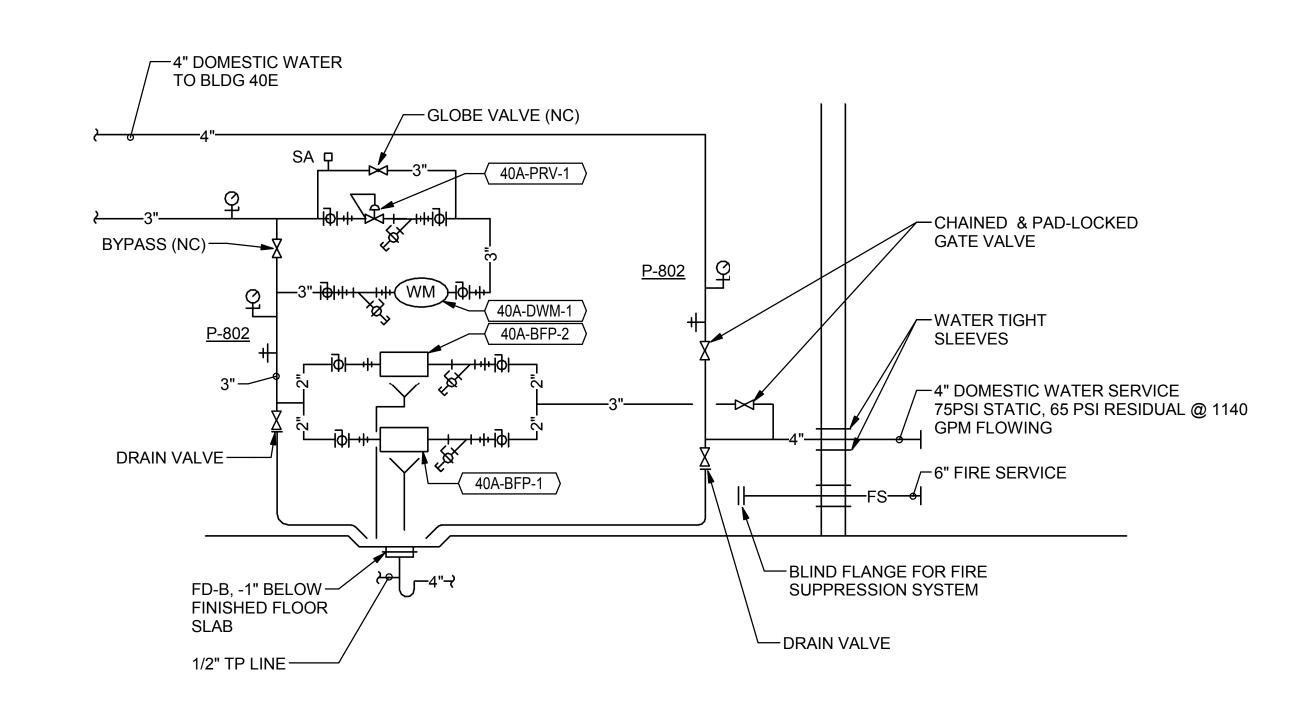
SCHEMATIC DESIGN

Revisions |



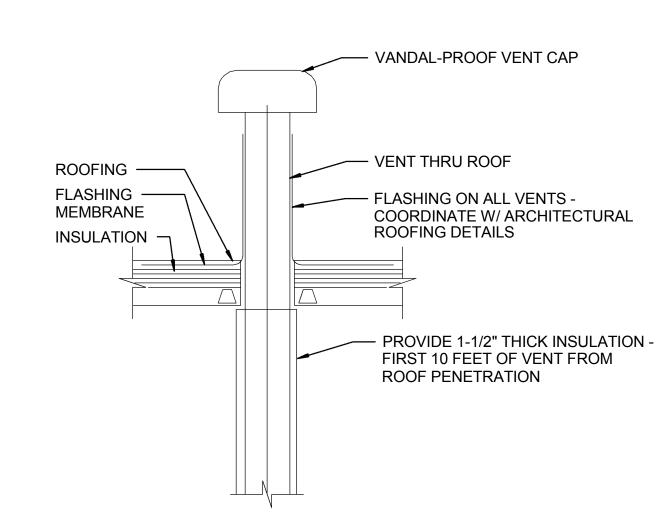


1 INDIRECT WASTE DRAIN FD-C NO SCALE

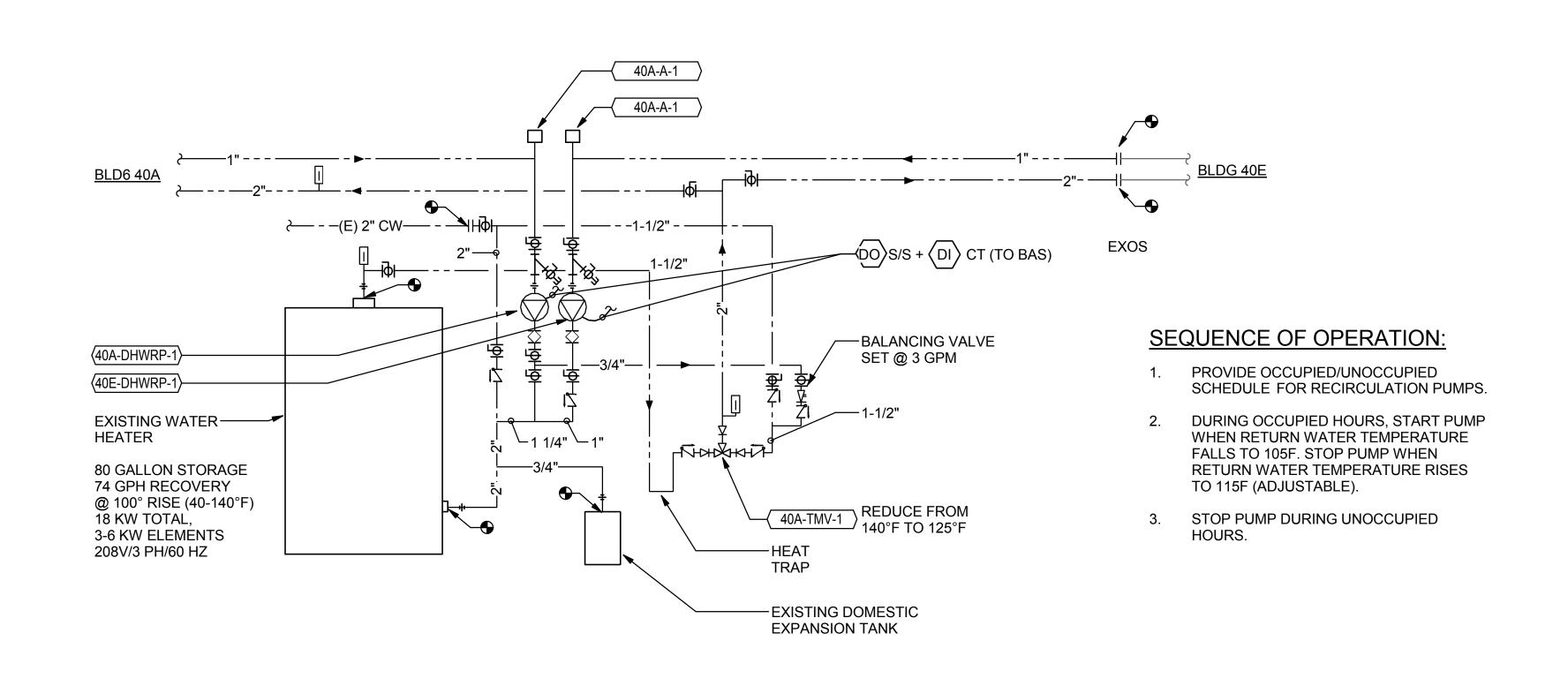


3 DOMESTIC WATER SERVICE HEADER NO SCALE

foot 0



2 VENT TERMINAL PENETRATION DETAIL NO SCALE



DOMESTIC WATER HEATER SYSTEM NO SCALE

### BID DOCUMENT NOVEMBER/02/2015

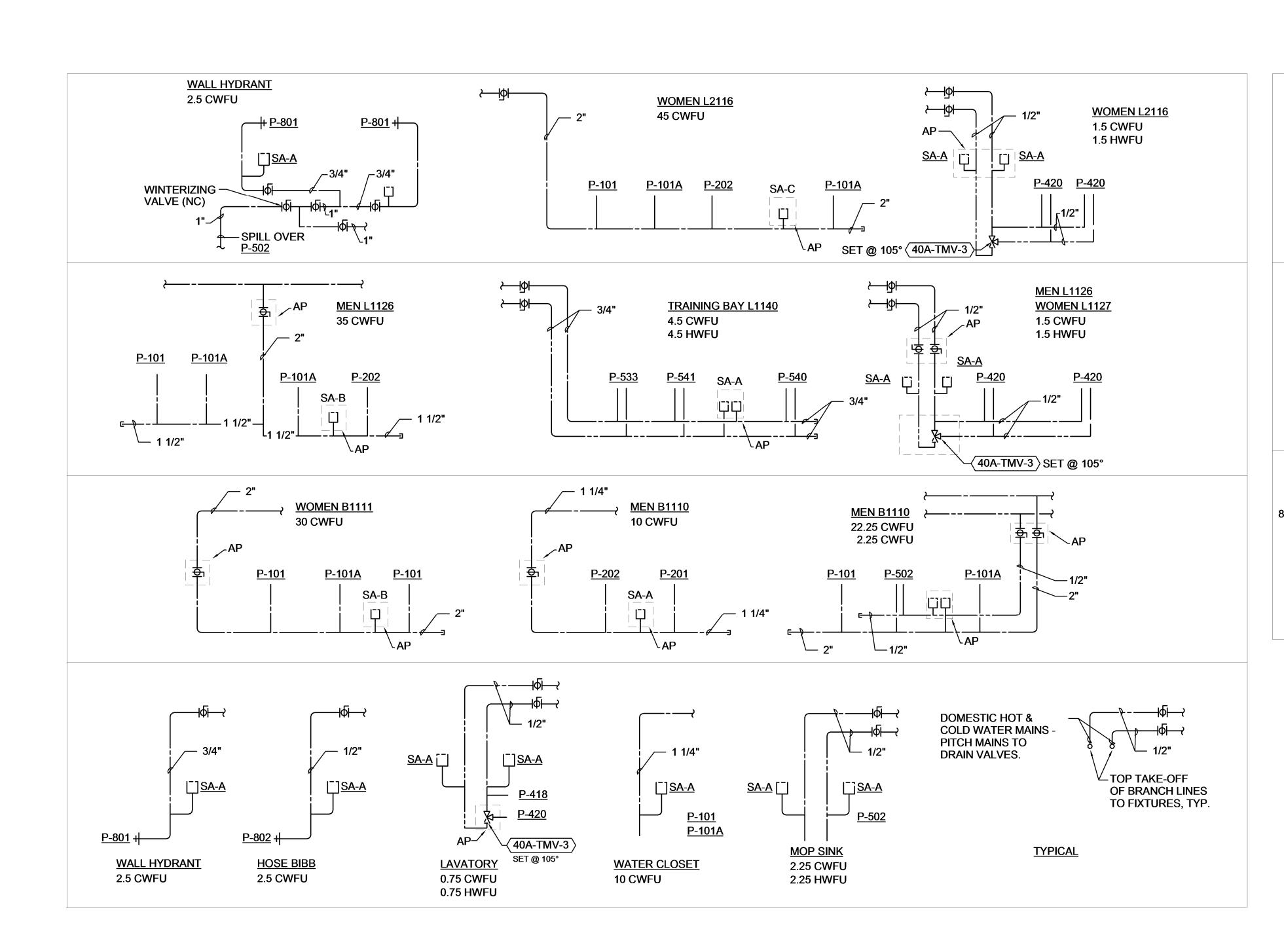
Drawing Title Project Title Project Number CONSULTANTS: ARCHITECT/ENGINEERS: Office of INTENSIVE OUTPATIENT MENTAL HEALTH PLUMBING DETAILS AND EDUCATION BUILDING Construction 11/02/2015 BID DOCUMENT PROJECT 2013-0512 Building Number CONTACT John McMichael SPOKANE VA MEDICAL CENTER SPOKANE, WASHINGTON 99205 1/26/2015 100% CONSTRUCTION DOCUMENT and Facilities INTERFACE ENGINEERING 12/30/14 Approved: Project Director Drawing Number Management 99% CONSTRUCTION DOCUMENT Location 12/17/14 100 SW Main Street SPOKANE, WASHINGTON 99205 95% CONSTRUCTION DOCUMENT Suite 1600
Portland, OR 97204
TEL 503.382.2266
FAX 503.382.2262
www.interfaceengineering.com 10/13/14 Approver **PL501** 65% DESIGN DEVELOPMENT 6/27/14 Checked 14410 SE Petrovitsky Rd. Suite 206 Department of Veterans Affairs SCHEMATIC DESIGN 3/28/14 Renton, WA 98058 **JRM** 11/02/2015 IEI EXP. 4/13/16 11/02/15 Dwg. of 425-291-7078 ISSUES Date Revisions |

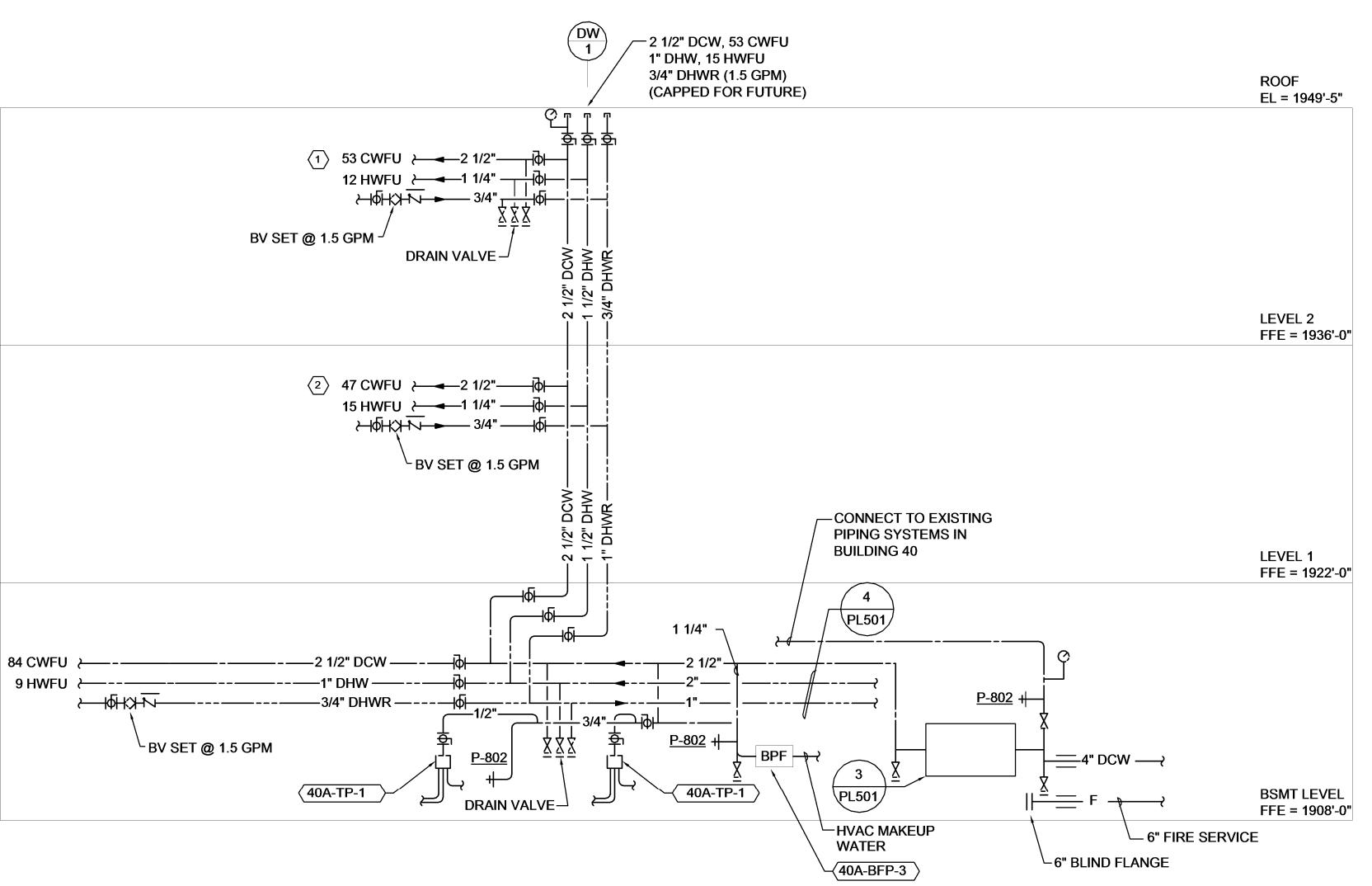
#### **GENERAL SHEET NOTES**

- A PITCH ALL PIPING MAINS AT 1" PER 100 TOWARD DRAIN VALVES IN JANITOR'S CLOSET OR MECHANICAL ROOMS. NO TRAPPED LINES PERMITTED IN DOMESTIC WATER PIPING.
- B PROVIDE SHOCK ARRESTORS WITH ACCESS PANELS.

#### ○ SHEET KEYNOTES

- PIPING MAINS SHALL BE PITCHED AT 1" PER 100 FEET TOWARD DRAIN VALVES OVER P=502 IN ROOM L2125.
- 2 PITCH PIPING AT 1" PER 100 FEET TOWARD DRAIN VALVES OVER P-502 IN ROOM L1150.





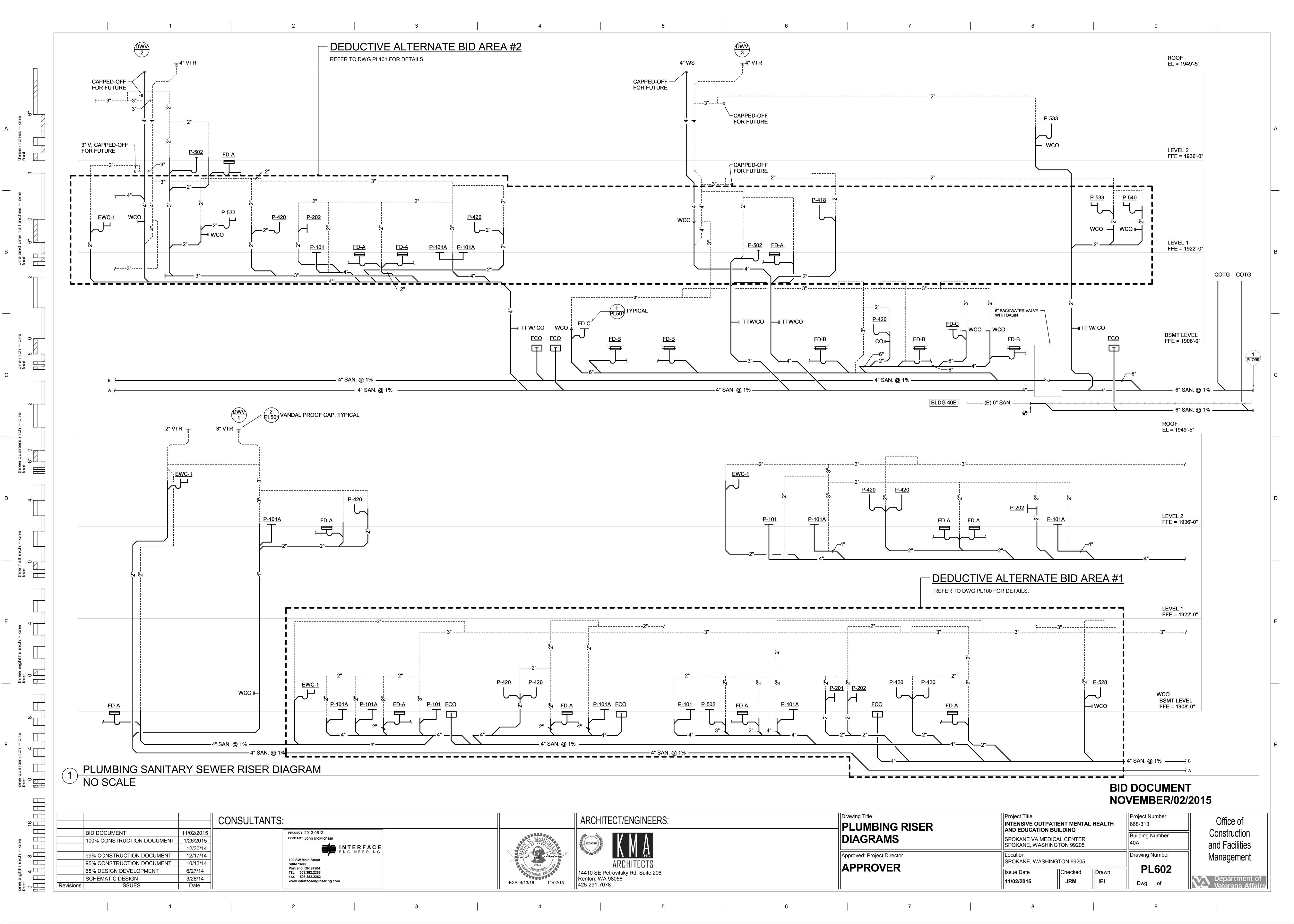
1 DOMESTIC WATER RISER DIAGRAM NO SCALE

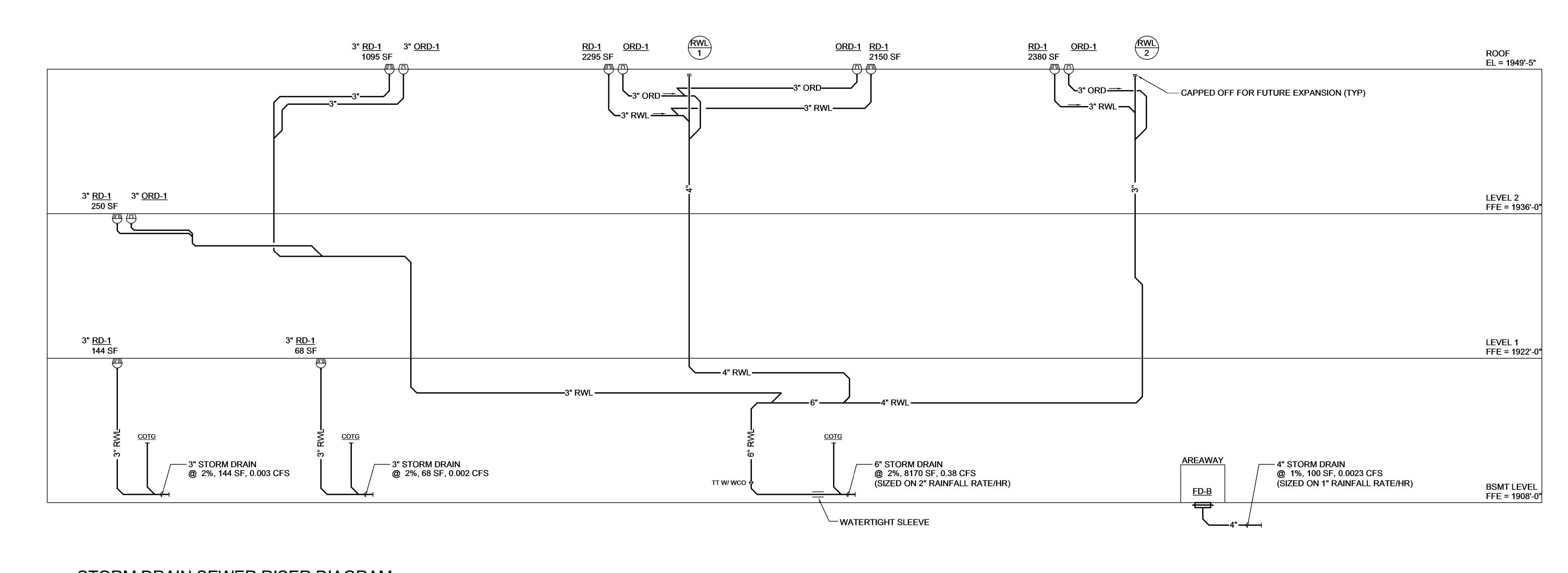
<sub>2</sub>

### BID DOCUMENT NOVEMBER/02/2015

9		CONSULTANTS:	ARCHITECT/ENGINEERS:	PLUMBING RISER	Project Title  INTENSIVE OUTPATIENT MENTAL HEALTH	Project Number 668-313	Office of
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th in the line of	99% CONSTRUCTION DOCUMENT 12/17/14 95% CONSTRUCTION DOCUMENT 10/13/14	ENGINEERING  100 SW Main Street Suite 1600 Portland, OR 97204	ARCHITECTS	Approved: Project Director  Approver	Location SPOKANE, WASHINGTON 99205	Drawing Number PL601	Management
one eight foot 0 4	65% DESIGN DEVELOPMENT 6/27/14  SCHEMATIC DESIGN 3/28/14  Revisions ISSUES Date	TEL 503.382.2266 FAX 503.382.2262 www.interfaceengineering.com	EXP. 4/13/16 11/02/15 14410 SE Petrovitsky Rd. Suite 206 Renton, WA 98058 425-291-7078	Дрготсі	Issue Date  11/02/2015  Checked  JRM  IEI	Dwg. of	Department of Veterans Affairs

1 2 5 9





STORM DRAIN SEWER RISER DIAGRAM NO SCALE

one ar foot

one qua foot 0

### **GENERAL SHEET NOTES**

INSULATE ALL HORIZONTAL RWL & ORD LINES. DO NOT INSULATE VERTICAL LEADERS.

#### **BID DOCUMENT NOVEMBER/02/2015**

one eighth inch = one foot

0 4 8 16 Drawing Title Project Title Project Number CONSULTANTS: ARCHITECT/ENGINEERS: Office of INTENSIVE OUTPATIENT MENTAL HEALTH AND EDUCATION BUILDING PLUMBING RISER Construction PROJECT 2013-0512 CONTACT John McMichael 11/02/2015 BID DOCUMENT Building Number DIAGRAMS SPOKANE VA MEDICAL CENTER SPOKANE, WASHINGTON 99205 100% CONSTRUCTION DOCUMENT 1/26/2015 and Facilities INTERFACE ENGINEERING 12/30/14 Drawing Number Management Approved: Project Director Location 99% CONSTRUCTION DOCUMENT 12/17/14 100 SW Main Street SPOKANE, WASHINGTON 99205 95% CONSTRUCTION DOCUMENT Suite 1600
Portland, OR 97204
TEL 503.382.2266
FAX 503.382.2262
www.interfaceengineering.com 10/13/14 Approver **PL603** 65% DESIGN DEVELOPMENT 6/27/14 Checked 14410 SE Petrovitsky Rd. Suite 206 Department of Veterans Affairs Renton, WA 98058 425-291-7078 3/28/14 SCHEMATIC DESIGN JRM 11/02/2015 IEI Dwg. of EXP. 4/13/16 11/02/15 Date ISSUES Revisions

PLUMBING PUMP SCHEDULE BASIS OF DESIGN DESCRIPTION MANUFACTERER DOMESTIC HOT WATER RECIRCULATION PUMP DOMESTIC WATER HEATING SYSTEM BELL & GOSSETT DOMESTIC HOT WATER EXISTING DOMESTIC WATER 3300 120 40E-DHWRP-1 BELL & GOSSETT PL-45B RECIRCULATION PUMP HEATING SYSTEM NOTES:

PROVIDE WYE STRAINERS WITH THREADED END BALL VALVE WITH CAP AND CHAIN MOUNTED ON SUCTION SIDE OF PUMP.

PLUMBING BACKFLOW PREVENTER SCHEDULE								
				BASIS OF	DESIGN		WEIGHT	
MARK	DECRIPTION	SYSTEM	CAPACITIES	MANUFACTURER	MODEL	DCW	(LBS)	
40A-BFP-1	REDUCED PRESSURE ZONE BACKFLOW PREVENTER	DOMESTIC WATER SERVICE	75 GPM @ 15 PSI DROP.	WILKINS	975-U-S-AG	2"	16	
40A-BFP-2	REDUCED PRESSURE ZONE BACKFLOW PREVENTER	DOMESTIC WATER SERVICE	75 GPM @ 15 PSI DROP.	WILKINS	975-U-S-AG	2"	16	
40A-BFP-3	REDUCED PRESSURE ZONE BACKFLOW PREVENTER	HVAC MAKE-UP WATER	20 GPM @ 15 PSI DROP.	WILKINS	975XL2U-S-AG	3/4"	15	
NOTES:	PROVIDE WYE STRAINER WITH THREADED END BALL VALVE	WITH CAP & CHAIN ON SUCTION SIDE	OF BACKFLOW PREVENTER ASSEME	BLY AND UNION TYPE BALL VALVES (	ON BOTH SIDES OF BACKFLOW	PREVENTER ASS	EMBLY.	

PLUMBING DEVICES SCHEDULE										
				BASIS O	F DESIGN		WEIGHT			
MARK	DESCRIPTION	SYSTEM	CAPACITIES	MANUFACTURER	MODEL	DCW	DHW	TW	(LBS)	
40A-TP-1	TRAP PRIMER	DOMESTIC COLD WATER		PPP	PR-500 PRIME RITE	1/2"			10	
40A- DWM-1	DOMESTIC WATER METER	DOMESTIC COLD WATER	126 GPM PEAK LOAD	NEPTUNE	HP TURBINE METER					
40A-TMV-1	THERMOSTATIC MIXING VALVE - MASTER	DOMESTIC HOT WATER	35 GPM @ 15 PSI DROP. SET AT 125 F	LEONARD	LV-982-LF-RF-BD7	1"	1"	1-1/4"	25	
40A-TMV-2	EMERGENCY EYE WASH MIXING VALVE	DOMESTIC HOT WATER	5 GPM @ 18 PSI DROP. SET AT 85 F	LAWLER	911EF	1/2"	1/2"	1/2"	15	
40A-TMV-3	THEMOSTATIC MIXING VALVE WITH CHECK MODULES - LAVATORIES	DOMESTIC HOT WATER	1 GPM @ 2 PSI DROP. SET AT 105 F	LAWLER	570	1/2"	1/2"	1/2"	2	
40A-PRV-1	PRESSURE REDUCING VALVE STATION	DOMESTIC COLD WATER	80 GPM @ 10 PSI LOSS, 95 PSI STATIC, SET UNIT @ 65 PSI DISCHARGE	WILKINS	500XLHTSTSC	2"			10	
40A-PRV-2	PRESSURE REDUCING VALVE STATION	DOMESTIC COLD WATER	40 GPM @ 10 PSI LOSS, 95 PSI STATIC, SET UNIT @ 76 PSI DISCHARGE	WILKINS	500XLHTSTSC	1-1/4"			5	

		PLUMBII	NG ELECTRIC	CAL DEVICES	S SCHEDULE						
			BASIS OF	F DESIGN			ELEC.	TRICAL			
MARK	DESCRIPTION	SYSTEM	MANUFACTURER	MODEL	CAPACITIES	VOLTS	PH	AMPS	HZ	WEIGHT (LBS)	
EWC-1	ELECTRIC WATER COOLER	PLUMBING FIXTURE	SEE PLUMBING FIXTURE SPECIFICATION	SEE PLUMBING FIXTURE SPECIFICATION	8 GPH OF 50 F CHILLED WATER	120	1	5	60	175	
P-101, P-101A, P-201 & P-202	ELECTRIC FLUSH VALVES	PLUMBING FIXTURE	SEE PLUMBING FIXTURE SPECIFICATION	SEE PLUMBING FIXTURE SPECIFICATION	1 TRANSFORMER PER 2 FLUSH VALVES	24	1			5	
S-532	SINK	HW DISPENSER	SEE PLUMBING FIXTURE SPECIFICATION	SEE PLUMBING FIXTURE SPECIFICATION		120	1	6.25	60	15	
40A-A-1	AQUASTAT	DOMESTIC WATER HEATING SYSTEM	HONEYWELL	L6006C1018	65 TO 200 F, SET AT 118 F	120	1	8	60	5	
	HEAT MAINTENANCE TAPE	ROOF DRAIN SYSTEM	RAYCHEM	ICE-STOP	30 FEET OF CABLE, 12W/FT2	120	1		60	15	

FLOW-GPM 137 | 136 | 38

MAIN SIZE 4" 3" 1-1/2"

	C	ALCUI	<b>LATIO</b>	NS			
			UNIT FIXTURE		тот	AL FIXTURE U	NITS
FIXTURE QUANTITY	DESCRIPTION	DWS WSFU	DCW	DHW HWFU	DWS WSFU	COLD	HOT HWFU
QUANTITI	DESCRIPTION	VVSFU	CVVFU	ПИУГО	VVSFU	CWFU	ПИТО
17	WATER CLOSET, FV, 1.28 GPF	10.00	10.00		170.00	170.00	
7	URINAL, FV, 0.125 GPF	5.00	5.00		35.00	35.00	
15	LAVATORY/HANDSINKS	1.00	0.75	0.75	15.00	11.25	11.25
10	SINK	2.00	1.50	1.50	20.00	15.00	15.00
1	SINK - STAFF	2.00	1.50	1.50	2.00	1.50	1.50
4	SERVICE SINK OR MOP BASIN (COUNT 1)	3.00	2.25	2.25	3.00	2.25	2.25
7	DRINKING FOUNTAIN OR WATER COOLER	0.50	0.50		3.50	3.50	
1	EMERGENCY EYE WASH	5.00	3.75	3.75	5.00	3.75	3.75
10	HOSE BIBB/WALL HYDRANTS	2.50	2.50		25.00	25.00	
1	HVAC MAKE-UP	20.00	20.00		20.00	20.00	
1	IRRIGATION MAKE-UP	20.00	20.00		20.00	20.00	
1	EXISTING BLDG 40E	180.00	180.00		180.00	180.00	45.00

QTY	DESCRIPTION	GENERAL	TOTAL FIXTUR UNITS
17	WATER CLOSET, 1.128 GPF FLUSHOMETER VALVE	6.00	102.00
5	URINALS, 0.125 GPF FLUSH VALVE	2.00	10.00
15	LAVATORY/HAND SINKS	1.00	15.00
10	SINK, CRS	3.00	30.00
1	SINK, STAFF	3.00	3.00
4	SERVICE SINK OR MOP BASIN, 3" TRAP	3.00	12.00
			0.00
6	DUAL UNIT BARRIER FREE ELECTRIC WATER COOLER	0.50	3.00
16	FINISHED AREA FLOOR DRAIN A - 2"	2.00	32.00
4	UNFINISHED AREA/MECH RM FLOOR DRAIN B - 4"	6.00	24.00
2	HUB DRAIN - 6"	6.00	12.00

				CON	NECTION (	(")	
MARK	DESCRIPTION	SPECIFICATION	W	V	DCW	DHW	S
P-101	WATER CLOSET, FLUSH VALVE, BARRIER FREE	TOTO CT705ELNG -01 FLOOR SET FIXTURE WITH SLOAN 111-1.28-ES-S-TMO-EL 154 ELECTRONIC 24 VOLT/60HZ FLUSH VALVE & BEMIS 2155SSC-000 ANTI-MICROBIAL SEAT	4	2	1 1/4	-	
P-101A	WATER CLOSET, FLUSH VALVE, BARRIER FREE WITH TRAP PRIMER	TOTO CT705ELNG -01 FLOOR SET FIXTURE WITH SLOAN 111-1.28-ES-S-TMO-TP-EL 154 ELECTRONIC 24 VOLT/60HZ FLUSH VALVE WITH TRAP PRIMER ASSEMBLY & BEMIS 2155SSC-000 ANTI-MICROBIAL SEAT FITTING	4	2	1 1/4	-	
P201	URINAL, FLUSH VALVE	TOTO UT447EV WALL HUNG FIXTURE WITH SLOAN 186-0.5ES-S TMO, EL-154 ELECTRONIC 24 VOLT/60HZ FLUSH VALVE AND ZURN CARRIER FITTING	2	2	3/4	-	
P202	URINAL, FLUSH VALVE, BARRIER FREE	TOTO UT447EV WALL HUNG FIXTURE WITH SLOAN 186-0.5ES-S TMO, EL-154 ELECTRONIC 24 VOLT/60HZ FLUSH VALVE AND ZURN CARRIER FITTING	2	2	3/4	-	
P-418	LAVATORY, BARRIER FREE	TOTO LT307.4 WALL HUNG FIXTURE WITH CHICAGO 116.112.AB.1 SENSOR DECK MOUNTED FAUCET, 1.892 LPM/0.5 GPM, PROVIDE 12 VOLT TRANSFORMER;O OMNI L-400-0.5 SPOUT, MCGUIRE 8902CDF P-TRAP, MCGUIRE LFBV175-DF-R15 SUPPLIES & QUARTER TURN STOPS AND MCGUIRE 155A GRID STRAINER. PROVIDE MCGUIRE PROWRAP FOR P-TRAP & SUPPLIES.	2	2	1/2	1/2	
P-420	LAVATORY, BARRIER FREE	TOTO LT307.4 WALL HUNG FIXTURE WITH CHICAGO 420-E2805ABCP MANUAL DECK MOUNTED FAUCET, 1.892 LPM/0.5 GPM;O OMNI L-400-0.5 SPOUT, MCGUIRE 8902CDF P-TRAP, MCGUIRE LFBV175-DF-R15 SUPPLIES & QUARTER TURN STOPS AND MCGUIRE 155A GRID STRAINER. PROVIDE MCGUIRE PROWRAP FOR P-TRAP & SUPPLIES.	2	2	1/2	1/2	
P-502	SERVICE SINK, CORNER TYPE	STERN WILLIAMS MODEL CRS-2202 FLOOR SET FIXTURE WITH CHICAGO MODEL 540-LD897SWXF-RC	3	2	1/2	1/2	
P-528	SINK -KITCHEN	ELKAY MODEL LRAD-1316 13 X 16 X 6-1/2 SINGLE BOWL COUNTER MOUNTED SINK WITH CHICAGO MODEL 1100-GN2AE35-317AB FAUCET WITH OMNI MODEL A-400-1.5 GPM LAMINAR SPOUT/MCGUIRE 8912CDF P-TRAP, MCGUIRE LFBV175-DF-R15 SUPPLIES & QUARTER TURN STOPS AND MCGUIRE 151 BASKET STRAINER. PROVIDE MCGUIRE PROWRAP FOR P-TRAP & SUPPLIES.	2	2	1/2	1/2	
P-532	SINK - STAFF/BREAKROOM	ELKAY MODEL LRAD2922 29 X 22 X 6-1/2 DOUBLE BOWL COUNTER MOUNTED SINK WITH CHICAGO MODEL 201-AGN8AFC317ABCP FAUCET WITH OMNI MODEL A-400-1.5 GPM LAMINAR SPOUT/5.7 LPM LAMINAR SPOUT; MCGUIRE 8912CDF P-TRAP, MCGUIRE LF177LK-DF-R15 SUPPLIES & QUARTER TURN STOPS AND MCGUIRE 151 BASKET STRAINER; PROVIDE 1/2" CW LINE WITH AQUA-PURE AP200 IN-LINE FILER ,VALVED & CAPPED FOR COFFEE MAKER. PROVIDE MCGUIRE PROWRAP FOR P-TRAP & SUPPLIES;IN-SIN-ERATOR HWD MODEL F-GN1100/HWT-F1000S FILTER & HEATING UNIT	2	2	1/2	1/2	
P-533	SINK - TRAINING	ELKAY MODEL DLR332212 33 x 22 x 12 DOUBLE BOWL TYPE 316 COUNTER MOUNTED SINK WITH CHICAGO MODEL 201-AGN8AFC317ABCP FAUCET WITH OMNI MODEL A-400-1.5 GPM LAMINAR SPOUT/MCGUIRE 8912CDF P-TRAP, MCGUIRE LFBV175-DF-R15 SUPPLIES & STOPS AND MCGUIRE 152 GRID STRAINER. PROVIDE MCGUIRE PROWRAP FOR P-TRAP & SUPPLIES.	2	2	1/2	1/2	
P-540	SINK - TRAINING	COUNTER MOUNTED FIXTURE-OFCI; PROVIDE CHICAGO MODEL 201-AGN8AFC317ABCP FAUCET WITH OMNI MODEL A-400-1.5 GPM LAMINAR SPOUT/MCGUIRE 8912CDF P-TRAP, MCGUIRE LFBV175-DF-R15 SUPPLIES & STOPS AND MCGUIRE 152 GRID STRAINER. PROVIDE MCGUIRE PROWRAP FOR P-TRAP & SUPPLIES.	2	2	1/2	1/2	
P-541	SPRAY FAUCET - TRAINING	CHICAGO MODEL 919-LVBABCP DECK MOUNTED FAUCET, MCGUIRE LFBV175-DF-R15 SUPPLIES & STOPS. INSTALL BETWEEN P-533 & P-540.	-	-	1/2	1/2	
P-707	EMERGENCY EYE WASH	HAWS MODEL 7611	-	-	3/4	3/4	
P-801	WALL HYDRANT - EXTERIOR	JR SMITH MODEL 5560QT-19*H*W-RB, RECESSED BOX TYPE	-	-	3/4		
P-802	HOSE BIBB - INTERIOR	JR SMITH MODEL 5672	-	-	1/2	-	
P-803	ROOF HYDRANT - EXTERIOR	WOODFORD MODEL 65 WALL MOUNTED HYDRANTS	-	-	3/4	-	
EWC-1	DUAL UNIT ELECTRIC WATER COOLER, BARIER FREE	ELKAY MODEL LRPBGRNM28K WITH 'WATER SENTRY' FILTER SYSTEM	2	2	1/2	-	
FD-A	FLOOR DRAIN - FINISHED AREAS	ZURN MODEL Z/S-415-6B-P-IC(NH), SIX INCH STRAINER	2	2	1/2 TP	-	
FD-B	FLOOR DRAIN - MECHANICAL/ ROOM	ZURN MODEL Z-520-DG-P-t-Y-IC(NH), 12 INCH SQUARE STRAINER	4	2	1/2 TP	-	
FD-C	OPEN SITE DRAIN (HUB DRAIN)	SVCI CAST IRON PIPING AND FITTING - PROVIDE 8 x 6 REDUCER WITH 8" STANDPIPE	6	3	1/2 TP	-	
RD-1	ROOF DRAIN	ZURN MODEL ZA-100-C-E-R	-	-	-	-	;
ORD-1	OVERFLOW ROOF DRAIN	ZURN MODEL ZA-100-C-E-R-S-W2	-	_	-	-	(

	DESCRIPTION	CONNECTION		REMARKS
YMBOL		SIZE	FIXTURE UNITS	
SA-A	SHOCK ARRESTOR	1/2"	1 - 11	
SA-B	SHOCK ARRESTOR	3/4"	12 - 32	
SA-C	SHOCK ARRESTOR	1"	33 - 60	
SA-D	SHOCK ARRESTOR	1-1/4"	60 - 113	

NOTES

- PROVIDE SHOCK ARRESTORS AT THE LOCATIONS OF WATER CLOSETS, HEATERS URINALS, HOSE BIBBS, WALL HYDRANTS, EWC'S, ELECTRONIC DEVICES, PRV ASSEMBLIES & LOCATIONS SHOWN ON SHEET PL601
- 2 PROVIDE ACCESS PANEL AT EACH LOCATION.

2 ALL FIXTURES SHALL BE SEALED TO SURFACES WITH SILICONE SEALANT MATCHING ARCHITECTURAL WALL FINISHES.

3 MOUNT HOSE BIBBS AND WALL HYDRANTS AT 457MM ABOVE FINISHED GRADE OR FLOOR LEVEL.

4 COORDINATE SINK CUT-OUTS & FAUCET HOLES WITH CABINET MAKER.

3 WHEN BRANCH LINE PRESSURE EXCEEDS 65 PSI PROVIDE NEXT LARGER SIZE ARRESTOR.

# BID DOCUMENT NOVEMBER/02/2015

Drawing Title Project Title Project Number CONSULTANTS: ARCHITECT/ENGINEERS: Office of INTENSIVE OUTPATIENT MENTAL HEALTH AND EDUCATION BUILDING PLUMBING SCHEDULES Construction PROJECT 2013-0512 CONTACT John McMichael BID DOCUMENT 11/02/2015 Building Number SPOKANE VA MEDICAL CENTER SPOKANE, WASHINGTON 99205 100% CONSTRUCTION DOCUMENT 1/26/2015 and Facilities INTERFACE ENGINEERING 12/30/14 Approved: Project Director Drawing Number Management 99% CONSTRUCTION DOCUMENT 12/17/14 SPOKANE, WASHINGTON 99205 100 SW Main Street 95% CONSTRUCTION DOCUMENT Suite 1600
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www.interfaceengineering.com 10/13/14 Approver **PL610** 65% DESIGN DEVELOPMENT Checked 6/27/14 14410 SE Petrovitsky Rd. Suite 206 Department of Veterans Affairs Renton, WA 98058 425-291-7078 SCHEMATIC DESIGN 3/28/14 JRM 11/02/2015 IEI Dwg. of EXP. 4/13/16 11/02/15 ISSUES Date Revisions

one eighth inch = one foot 0.4.8.8.16 0.4.8.8 0.4.8.8 0.4.8 0.4.8 0.4.8 0.4.8 0.4.8 0.4.8 0.4.8 0.4.8 0.4